

Firat University
Faculty of Science
Department of Biology Curriculum

1st Semester						
C. Code	Course Name	C/E	T	P	C	ECTS
BIO1101	General Biology I	C	3	0	3	5
BIO1103	General Biology I Laboratory	C	0	2	1	3
BIO1105	Microtechnics	C	2	0	2	4
BIO1107	Microtechnical Laboratory	C	0	2	1	3
MAT1123	Basic Mathematics	C	2	0	2	3
FIZ1113	Physical	C	2	0	2	2
FIZ1105	Physics Laboratory	C	0	2	1	2
BIO1109	Biometrics	C	3	0	3	4
TRD109	Turkish Language I	C	2	0	2	2
YDI107	English I	C	2	0	2	2
	Semester Total		16	6	19	30
2nd Semester						
C. Code	Course Name	C/E	T	P	C	ECTS
BIO1102	General Biology II	C	3	0	3	5
BIO1104	General Biology II Laboratory	C	0	2	1	3
KIM1112	Basic Chemistry	C	2	0	2	3
KIM1114	Basic Chemistry Laboratory	C	0	2	1	2
BIO1106	Hydrobiology	C	2	2	3	4
BIO1108	Biophysics	C	2	0	2	3
BIO1110	Fundamentals of Systematics	C	2	0	2	3
BIO1112	Project Training	C	0	2	1	3
TRD110	Turkish Language II	C	2	0	2	2
YDI108	English II	C	2	0	2	2
	Semester Total		15	8	19	30
3rd Semester						
C. Code	Course Name	C/E	T	P	C	ECTS
BIO2101	Cell Biology	C	3	0	3	4
BIO2103	Cell Biology Laboratory	C	0	2	1	2
KIM2133	Organic Chemistry	C	2	0	2	2
KIM2135	Organic Chemistry Laboratory	C	0	2	1	2
BIO2105	Molecular Biology I	C	3	0	3	3
BIO2107	Molecular Biology Laboratory	C	0	2	1	2
BIO2109	Microbiology	C	3	0	3	4
BIO2111	Microbiology Laboratory	C	0	2	1	2
BIO2113	Ecology I	C	2	0	2	2
YDI207	English III	C	2	0	2	2
AIT209	Ataturk's Principles and Revolution History	C	2	0	2	2
SSD2101	<i>Social Elective Course-I</i>	E	2	0	2	3
	Semester Total		19	8	23	30

4th Semester						
C. Code	Course Name	C/E	T	P	C	ECTS
BIO2102	Animal Histology	C	3	0	3	3
BIO2104	Animal Histology Laboratory	C	0	2	1	3
BIO2106	Molecular Biology II	C	3	0	3	4
BIO2108	Plant Morphology and Anatomy	C	4	0	4	4
BIO2110	Plant Morphology and Anatomy Laboratory	C	0	2	1	1
BIO2112	Ecology II	C	2	0	2	3
BIO2114	Biotechnology	C	2	0	2	2
BIO2116	Bacteriology	E	2	0	2	3
AIT210	Ataturk's Principles and Revolution History	E	2	0	2	2
YDI208	English IV	E	2	0	2	2
SSD2102	<i>Social Elective Course-II</i>	E	2	0	2	3
	Semester Total		22	4	24	30
5th Semester						
C. Code	Course Name	C/E	T	P	C	ECTS
BIO3101	Genetics I	C	3	3	4	4
BIO3103	Cryptogamic Plants	C	3	0	3	3
BIO3105	Cryptogamic Plants Laboratory	C	0	2	1	1
BIO3107	Vertebrates Animals I	C	2	0	2	2
BIO3109	Vertebrates Animals I Lab.	C	0	2	1	1
BIO3111	Biochemistry I	C	3	0	3	3
BIO3113	Biochemistry I Laboratory	C	0	2	1	1
SSD3101	<i>Social Elective Course-III</i>	E	2	0	2	3
	<i>Departmental Elective Course</i>	E	2	0	2	4
	<i>Departmental Elective Course</i>	E	2	0	2	4
	<i>Departmental Elective Course</i>	E	2	0	2	4
Departmental Elective Course List (3 Elective Courses Must Be Selected)						
BIO3115	Professional Foreign Language	E	2	0	2	4
BIO3117	Biogeography	E	2	0	2	4
BIO3119	Environmental Biology	E	2	0	2	4
BIO3121	Parasitology	E	2	0	2	4
BIO3123	Environmental Impact Assessment	E	2	0	2	4
BIO3125	Industrial Microbiology	E	2	0	2	4
BIO3127	Nanobiotechnology	E	2	0	2	4
BIO3129	Plant Growing Methods	E	2	0	2	4
	Semester Total		19	9	23	30

6th Semester						
C. Code	Course Name	C/E	T	P	C	ECTS
BIO3102	Genetics II	C	3	3	4	4
BIO3104	Biochemistry II	C	3	0	3	3
BIO3106	Biochemistry II Laboratory	C	0	2	1	1
BIO3108	Vertebrates Animals II	C	2	0	2	2
BIO3110	Vertebrates Animals II Lab.	C	0	2	1	1
BIO3112	Seeded Plants	C	3	0	3	3
BIO3114	Seeded Plants Laboratory	C	0	2	1	1
SSD3102	<i>Social Elective Course-IV</i>	E	2	0	2	3
	<i>Departmental Elective Course</i>	E	1	2	2	4
	<i>Departmental Elective Course</i>	E	2	0	2	4
	<i>Departmental Elective Course</i>	E	2	0	2	4
Departmental Elective Course List (3 Elective Courses Must Be Selected)						
BIO3116	Terrain Application	E	1	2	2	4
BIO3118	Instrumental Analysis in Biology	E	2	0	2	4
BIO3120	Nature Conservation	E	2	0	2	4
BIO3122	Algal Ecology	E	2	0	2	4
BIO3124	Plant Genome Analysis	E	2	0	2	4
BIO3126	Plant Chemicals	E	2	0	2	4
BIO3128	Metabolism Biochemistry	E	2	0	2	4
BIO3130	Biosafety and Bioethics	E	2	0	2	4
BIO3132	Professional Foreign Language II	E	2	0	2	4
	Semester Total		18	11	23	30
7th Semester						
C. Code	Course Name	C/E	T	P	C	ECTS
BIO4101	Animal Physiology	C	4	0	4	4
BIO4103	Animal Physiology Laboratory	C	0	2	1	2
BIO4105	Evolution	C	2	0	2	3
BIO4107	Invertebrates Animals I	C	2	0	2	3
BIO4109	Invertebrates I Lab.	C	0	2	1	2
BIO4111	Plant Embryology	C	3	0	3	3
BIO4113	Professional Practice	C	0	2	1	1
	<i>Departmental Elective Course</i>	E	2	0	2	4
	<i>Departmental Elective Course</i>	E	2	0	2	4
	<i>Departmental Elective Course</i>	E	2	0	2	4
Departmental Elective Course List (3 Elective Courses Must Be Selected)						
BIO4115	Mycology	E	2	0	2	4
BIO4117	Plant Nutrition Physiology	E	2	0	2	4
BIO4119	Medicinal and Economic Plants	E	2	0	2	4
BIO4121	Pollution and Biological Monitoring	E	2	0	2	4
BIO4123	Virology	E	2	0	2	4
BIO4125	Toxicology	E	2	0	2	4
BIO4127	Genetic Engineering	E	2	0	2	4
BIO4035	Chemical Enzymology	E	2	0	2	4
	Semester Total		17	6	20	30

8th Semester						
C. Code	Course Name	C/E	T	P	C	ECTS
BIO4102	Plant Physiology	C	4	0	4	4
BIO4104	Plant Physiology Lab	C	0	2	1	2
BIO4106	Human Anatomy and Physiology	C	3	0	3	3
BIO4108	Invertebrates Animals II	C	2	0	2	2
BIO4110	Invertebrates Animals II Lab.	C	0	2	1	2
BIO4112	Bioinformatics	C	2	0	2	2
BIO4114	Human Embryology	C	3	0	3	3
	<i>Departmental Elective Course</i>	E	2	0	2	4
	<i>Departmental Elective Course</i>	E	2	0	2	4
	<i>Departmental Elective Course</i>	E	2	0	2	4
Departmental Elective Course List (3 Elective Courses Must Be Selected)						
BIO4116	Immunology	E	2	0	2	4
BIO4118	Tissue Culture Techniques	E	2	0	2	4
BIO4120	General Phytopathology	E	2	0	2	4
BIO4122	Palynology	E	2	0	2	4
BIO4124	Vegetation Science	E	2	0	2	4
BIO4126	Soil Biology	E	2	0	2	4
BIO4128	Animal Geography	E	2	0	2	4
BIO4130	Environmental Health	E	2	0	2	4
	Semester Total		20	4	22	30

C: Compulsory

E: Elective

T: Theoretical Course Hours

P: Practical Course Hours

C: Course Credit

ECTS: European Credit Transfer System